# Haines Highway - MP 3-25 Culvert Inventory

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Stainline height above invert refers to low point of metal culvert; does not reference accumulations of material within pipe

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If notes indicate lack of channel (downstream or upstream), then did not consider a Water of the U.S.

| | As-built Station | ADOT&PF Station (9/'05) | | QA'd | Culvert Size (in) | Culv Size | Culvert Length (ft) | As-Built Comment | Eng. Survey | Height to Stainline @ inlet(ft)[1] | Height to Stainline @ outlet(ft)[1] | fish bearing | Waters of the U.S. | Upstream conditions | Inlet Conditions | Outlet Conditions | Downstream conditions |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **Haines Highway MP 4 - 12.77 As-Builts** | | | | | | | | | | | | | | | | |
| 1 | 212+58 | 212+05 | 21205 | dm | 24 | 24 | 70 | | | 0.3 | | | N | drains ditch; no water present | clear of debris/sediment at inlet; crimping of inlet from maintenance; gravel present in barrel 0.2 ft | opens to voids in large riprap | discharges to ditch |
| 2 | 219+08 | 218+80 | 21880 | dm | 24 | 24 | 74 | | | | | | N | drains ditch; no water present | partially obstructed by grass/debris; pipe invert filled 0.25-0.5 ft with gravel/sediment | could not locate; either hidden by riprap, sand dunes, or veg. | u/s of airport berm |
| 3 | 235+52 | 234+90 | 23490 | dm | 24 | 24 | 60 | | | 0.5 | 1 | | N | flowing water present discharge from u/s pipe to short open channel into road culvert | undamaged; slight sediment and veg obstruction | invert perched 0.8 ft abv channel ws; outlet damaged but open | discharges to Chilkat trib/slough. Mostly runoff or GW drainage. |
| 4 | 237+51 | 237+00 | 23700 | dm | 24 | 24 | 60 | | | 1 | | | N | | inlet and barrel clear of debris/ sediment; bottom 0.2-0.3 ft rusted out | perched 0.45 ft abv scour pool ws | scour pool = 6 ft wide x 7 ft long x 1.4 ft depth. Trickle of water. |
| 5 | 246+02 | 245+00 | 24500 | dm | 48 | 48 | SeeSurv. | | Yes | 1 | | Yes | Y | juvenile salmonids present | undamaged; clear of debris/sediment | slight damage; backwatered 50-66% of barrel | scour pool = 15 ft wide x 20 ft long x 1-1.5 ft depth; pool backfilled with fines; metal debris (55 gal drum and outlet apron) in outlet pool |
| 6 | 252+55 | 251+90 | 25190 | dm | 24 | 24 | 60 | | | 0.75 | | | N | drains ditch @ SE Road Builders | undamaged; partially obstructed by grass | could not locate; likely covered by veg and backwater at wet meadow/wetland complex | discharges to wet meadow/wetland complex |
| 7 | 263+93 | 264+00 | 26400 | dm | 24 | 24 | 60 | | | 0.65 | | | Y | | undamaged; clear of debris/sediment; flowing water present | backwatered from wetland area | discharges to wet meadow/wetland complex |
| 8 | 268+75 | 269+00 | 26900 | dm | 36 | 36 | 60 | | | 0.65 | | | Y | | undamaged; some veg on streambed | no scour hole; outlet damaged, no perching | discharges to standing water in wetland area |
| 9 | 272+00 | 271+25 | 27125 | dm | 24 | 24 | 58 | | | 1.1 | | YES - S&HI | Y | drains wetland area (rushes) | undamaged | undamaged | discharges to standing water in wetland area; no scour pool; juvenile salmonids present |
| 10 | 316+46 | 315+50 | 31550 | dm | 24 | 24 | 50 | | | 0.7 | | YES - S&HI | Y | clean gravels <= 0.25 ft | inlet slightly crimped; flowing water present; drains stream (hydropower plant upstream) | outlet moderately crimped; backwatered 0.45 ft to stainline | flowing water |
| 11 | 316+50 | 315+50 | 31550 | dm | 24 | 24 | 50 | | | 0.7 | | YES - S&HI | Y | clean gravels <= 0.25 ft | inlet slightly crimped; flowing water present; drains stream (hydropower plant upstream) | outlet slightly crimped; backwatered 0.45 ft to stainline | flowing water |
| 12 | 322+19 | 321+00 | 32100 | dm | 24 | 24 | 56 | | | 0.4 | 0.6 | | Y | drains flowing water in ditch supplied from small cascades on adjacent hillslope | inlet slightly crimped | freefall discharge to Chilkat | discharges direct to Chilkat |
| 13 | 323+54 | 323+00 | 32300 | dm | 24 | 24 | 56 | | | 0.5 (rust line 1 ft) | | | Y | drains flowing water in ditch supplied from hillslope seeps | undamaged; flowing water | silt in outlet from Chilkat backwater; discharges to Chilkat bank; perched | discharges direct to Chilkat |
| 14 | 331+30 | could not locate | could not locate | dm | 24 | 24 | 56 | | | | | | N/A | | | | |
| 15 | 342+73 | 342+00 | 34200 | | 36 | 36 | SeeSurv. | | Yes | see survey data | | Yes | Y | water present | undamaged; stainline may be from Chilkat backflow | damaged; stainline may be from Chilkat backflow | water present |
| 16 | 348+30 | could not locate | could not locate | 48"? | 24 | 24 | 48 | | | | | | N/A | | | | |
| 17 | 348+57 | 347+50 | 34750 | MB | 48 | 48 | SeeSurv. | | Yes | see survey data | | YES - S&HI | Y | drains stream | inlet crimped; backwatered | undamaged; backwatered | small channel backwatered by Chilkat |
| 18 | 373+55 | 372+00 | 37200 | dm | 24 | 24 | 56 | | | 1 (rust line) | | | N | rel. dry forested area; drains wet drainage ditch | inlet crushed and covered with grasses | undamaged; 0.5 ft of silt | drains to rocklined outfall |
| 19 | 390+09 | 389+25 | 38925 | dm | 24 | 24 | 56 | | | 0.5 | | YES - S&HI | Y | drains stream (4 ft wide x 1 ft depth x 30 ft to hillslope); flowing water | inlet slightly crimped | outlet slightly crimped | silt lined channel (3 to 6 ft wide x 1.5 ft depth) |
| 20 | 392+69 | 391+75 | 39175 | dm | 24 | 24 | | | | | 0.3 (rust line 0.5) | YES - S&HI | Y | drains pool below waterfall | inlet crimped; flowing water present; slight debris obstruction | undamaged | discharges through silt deposits along Chilkat |
| 21 | 396+07 | 395+00 | 39500 | dm | 24 | 24 | 56 | | | | 0.6 (rust line) | | n | drains damp meadow area | obstructed by silt and veg; slightly crimped | freefall discharge to Chilkat; full of silt | |
| 22 | 405+81 | 404+50 | 40450 | dm | 36 | 36 | 56 | | No | | | YES - S&HI | Y | | | | |
| 23 | 427+27 | 426+00 | 42600 | dm | 24 | 24 | 64 | | | 0.1 | 0.1 | | N | small dry forested hillslope | damaged; dry | damaged; clear of silt; discharges to steep grass bank at Chilkat | discharges direct to Chilkat bank |
| 24 | 431+39 | 430+00 | 43000 | dm | 24 | 24 | 58 | | | no stainline/no rust line | no stainline/no rust line | | N | dry ditch at hillslope toe | slightly bent; clear; dry | crimped at top; freefall 0.5 ft to Chilkat bank | discharges direct to Chilkat bank |

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| | As-built Station | ADOT&PF Station (9/'05) | | QA'd | Culvert Size (in) | Culv Size | Culvert Length (ft) | As-Built Comment | Eng. Survey | Height to Stainline @ inlet(ft)[1] | Height to Stainline @ outlet(ft)[1] | fish bearing | Waters of the U.S. | Upstream conditions | Inlet Conditions | Outlet Conditions | Downstream conditions |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 25 | 434+51 | 433+50 | 43350 | dm | 24 | 24 | | | | 0.3 (rust line) | 0.3 (rust line) | | N | ditchline maintained to drain 'dry' grassy area | crimped; phone line cable exposed at inlet | freefall discharge to Chilkat bank; silt extends 5 ft into pipe to meet rustline elev | discharges direct to Chilkat bank |
| 26 | 443+80 | 442+75 | 44275 | dm | 24 | 24 | | | | | 0.5 (rust line) | YES - S&HI | Y | steep boulder cascade stream | torn, crimped, and crushed; inlet located at 15 ft diam pool below steep boulder cascade; flowing water | perched 0.5 ft; scour pool = 8 ft long x 12 ft wide x 1.5-2 ft depth | cobble / small boulder stream |
| 27 | 443+84 | 442+75 | 44275 | dm | 24 | 24 | | | | | 0.6 (rust line) | YES - S&HI | Y | steep boulder cascade stream | torn, crimped, and crushed; inlet located at 15 ft diam pool below steep boulder cascade; flowing water | perched 0.5 ft; scour pool = 8 ft long x 12 ft wide x 1.5-2 ft depth | cobble / small boulder stream |
| 28 | 457+01 | 456+00 | 45600 | dm | 24 | 24 | | | | 0.4 (rust line) | 0.4 | | Y | drains damp ditchline immediately below steep cascade (4 x 1 ft seep) | 1 ft diam rock at inlet (slight obstruction); inlet slightly crimped | slight silt/organics obstruction | shalllow channel approx 10 ft to top of Chilkat bank; no siltation |
| 29 | 473+16 | 472+00 | 47200 | dm | 24 | 24 | 58 | | | | 0.1 | | N | drains rocky hillslope below switchback driveway; dry | torn and crushed | clear; discharges to riprapped Chilkat bank | discharges direct to Chilkat bank |
| 30 | 477+44 | 476+50 | 47650 | dm | 24 | 24 | 62 | | | | 0.2 | | Y | drains small waterfall 50 ft updtich; hillslope mostly dry | moderately crushed; flowing water | 3 ft freefall to Chilkat riprap bank; pipe outlet located at Chilkat bank veg line | discharges direct to Chilkat bank |
| 31 | 486+74 | 485+50 | 48550 | dm | 24 | 24 | 52 | | | 1.2 | 0.3 (rust line) | | Y | drains small waterfalls | 0.3 ft sediment in inlet | 1 ft freefall to Chilkat bank | discharges direct to Chilkat bank |
| 32 | 493+85 | 491+50 | 49150 | dm | 24 | 24 | 60 | | | no stainline (rust line = 0.7 ft) | 0.8 (rust line) | | N | drains damp forested area | undamaged; no water present | pipe outlet located at Chilkat bank veg line | discharges to Chilkat sandbar at wood debris elev. Drainage pipe; no defined channel upstream; discharge dumps onto gravel bar. |
| 33 | 497+63 | 502+00 | 50200 | dm | 24 | 24 | 60 | | | | | | N | | obstructed by veg and organic debris; no water present | undamaged; 0.8 ft blocked by debris | |
| 34 | 507+36 | 506+00 | 50600 | dm | 48 | 48 | SeeSurv. | | Yes | see survey data | see survey data | YES - S&HI | Y | drains stream that drains wetland complex; juvenile salmonids observed | sheet flow at inlet apron (fish passage barrier); debris blocking passage inside pipe | drains into large outlet pool; undamaged; clear of debris | juvenile salmonids observed; imperceptive flow; no surface connection with Chilkat at d/s end |
| 35 | 536+86 | 534+00 | 53400 | dm | 24 | 24 | SeeSurv. | | Yes | see survey data | see survey data | Yes | Y | flowing stream; redds located just upstream of inlet; juvenile salmonids and a dolly varden adult observed | undamaged | undamaged | many pink carcasses; drains into flowing stream with good spawning gravels; long slough to Chilkat confluence |
| 36 | 536+91 | 534+00 | 53400 | dm | 36 | 36 | SeeSurv. | | Yes | see survey data | see survey data | Yes | Y | flowing stream; redds located just upstream of inlet; juvenile salmonids and a dolly varden adult observed | undamaged | undamaged | many pink carcasses; drains into flowing stream with good spawning gravels; long slough to Chilkat confluence |
| 37 | 542+31 | 540+10 | 54010 | dm | 24 | 24 | 60 | | | | 0.4 & 1 | | Y | drains emergent wetland | inlet base rusted out; veg obstructing inlet | backwatered by Chilkat | discharges to wetland area; perched |
| 38 | 548+88 | 547+00 | 54700 | dm | 24 | 24 | 60 | | | | | | Y | drains flat emergent wetland/wet meadow area | 0.5 ft obstructed by silt and organics | obstructed by veg; 0.5 ft open pipe; 1.5 ft obstructed by silt/organics | no defined channel |
| 39 | 555+36 | 553+50 | 55350 | dm | 24 | 24 | 60 | | | 0.5 (rust line) | | | Y | | torn; obstructed by silt and emergent veg; trickle of flowing water present | 0.9 ft silt/organics; encroaching veg | discharges to emergent wetland |
| 40 | 564+41 | 563+50 | 56350 | dm | 24 | 24 | | | | 0.3 | | | N | drains roadside ditch/ gen'l dry forested area | slightly torn; clear of debris | unraveled 0.5 ft; gravel deposition in outlet | drains to wet roadside ditch |
| 41 | 571+31 | 570+50 | 57050 | dm | 24 | 24 | 58 | | | | 0.8 (rust line) | | N | drains mostly dry forested area | obstructed by alders, grass, sediment | d/s berm approx. 0.8 ft causing rust line @ 0.8 ft | drains to flat wet meadow/emergent area |
| 42 | 581+53 | 579+50 | 57950 | dm | 24 | 24 | 56 | | | no stainline | no stainline | | N | drains dry hillslope and roadside ditch | water stains in base of corrugations | slight berm at outlet; no stainline | grasses laid flat |
| 43 | 593+79 | 592+00 | 59200 | dm | 24 | 24 | 60 | | | rustline 0.4-ft ***WIDE*** (convert to H) | 1 (backwatered by river?) | | N | drains dry forested area | rust line 0.4 ft wide; 0.3 ft obstructed by organic debris | backwatered by Chilkat (?) | drains to standing water |
| 44 | 596+62 | 595+00 | 59500 | dm | 24 | 24 | 60 | | | 0.2 | 0.7 (rust line) | | N | drains dry hillslope and roadside ditch | slightly crimped; invert above upstream sump | 0.3 ft organic matter | drains to roadside ditch/emergent wetland |
| 45 | 601+08 | 599+00 | 59900 | dm | 24 | 24 | 54 | | | 0.4 (rust line) | 1 (rust line) | | Y | drains dry hillslope and small emergent wetland area | | berm of organics 0.7 ft | drains to pond/emergent wetland |
| 46 | 604+50 | 602+50 | 60250 | dm | 24 | 24 | 60 | | | 1 | 1.5 (rust line) | | Y | drains emergent wetland | undamaged; water level 0.2 ft | undamaged | drains to pond/emergent wetland; channel = 1.5 ft wide x 0.5 ft depth; water 0.5 ft deep |
| 47 | 613+80 | 612+00 | 61200 | mb | 24 | 24 | SeeSurv. | | Yes | entire pipe stained | entire pipe stained | Yes | Y | juvenile salmonids observed | perched above inlet pool | perched | dominated by glacial silt from Chilkat |
| 48 | 613+85 | 612+00 | 61200 | mb | 24 | 24 | SeeSurv. | | Yes | entire pipe stained | entire pipe stained | Yes | Y | juvenile salmonids observed | undamaged; see survey for additional info | 1.5 ft cascade to ws of outlet pool | dominated by glacial silt from Chilkat |
| 49 | 621+37 | 620+50 | 62050 | dm | 24 | 24 | 58 | | | 0.7 | 0.3 | | Y | drains emergent wetland | 0.3 ft veg/silt | undamaged; 0.1 ft organics | drains to emergent wetland |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 50 | 631+88 | 632+00 | 63200 | dm | 24 | 24 | 64 | | | 1.1 | 1 | | Y | drains stream = 6 ft wide x 1 ft depth with lots of small woody debris | sides bent inward (vertical orientation); flowing water present | perched 1 ft above toe of stream bank; middle of outlet located at Chilkat bank veg line | discharges direct to Chilkat bank |
| 51 | 651+18 | 648+25 | 64825 | dm | 24 | 24 | 60 | | | 1.2 (backwater?) | | | Y | drains emergent wetland | obstructed by organics | 0.8 ft berm of organics; discharges to sump; surrounding ground is above pipe crown | no outlet channel |
| 52 | 667+57 | 666+00 | 66600 | dm | 24 | 24 | 66 | | | 0.7 | | | Y | drains small stream (dry) from ephemeral swamp area; channel 2 ft wide x 0.75 ft deep | inlet crimped | fully rusted; 1.5 ft freefall to channel bottom; scour pool (wet) = 10 ft wide x 5 ft long (recessed) | discharges direct to Chilkat side-channel |
| 53 | 672+37 | 670+00 | 67000 | mb | 36 | 36 | SeeSurv. | | Yes | | | YES - S&HI | Y | | perched | | Fairly active flow - see SH&I |
| 54 | 672+47 | 670+00 | 67000 | mb | 36 | 36 | SeeSurv. | | Yes | see survey data | see survey data | YES - S&HI | Y | stream (see survey data) | see survey data | entire pipe stained | stream (see survey data) |
| | | | | | | | | | | | | | | | | | |
| | Haines Highway MP 12.5 - 25.3 As-Builts | | | | | | | | | | | | | | | | |
| 55 | 680+80 | 679+00 | 67900 | dm | 24 | 24 | 52 | | | 0.2 ft moss line | | | N | drains sump from low depression/swale | crimped; moss line 0.2 ft | 0.2 ft organics in outlet | no d/s channel |
| 56 | 690+50 | 690+00 | 69000 | dm | 24 | 24 | 54 | | | | | | N | | slightly crimped; crown is below surrounding grade; 3 ft diam sump down to pipe inlet; 0.4 ft material in inlet | buried by silt to 0.75 ft above crown (by Chilkat river); 1 ft diam exit hole. | discharges direct to Chilkat bank |
| 57 | 695+20 | 694+00 | 69400 | mb | 24 | 24 | 66 | | | | | | N | drains meadow area | 90% plugged; dry | 100% plugged; non-functional | discharges direct to Chilkat bank |
| 58 | 711+18 | 710+00 | 71000 | mb | 24 | 24 | 54 | | | | | | N | drains road ditch | clear of debris; no stainline; no water present | 80% plugged; 1.2 ft silt in outlet | discharges direct to Chilkat bank |
| 59 | 718+78 | 718+00 | 71800 | mb | 24 | 24 | 58 | | | | | | N | drains road ditch at hillslope base | clear of debris; no stainline; no water present | damaged from riprap; 100% plugged with silt; located at Chilkat bank | discharges direct to Chilkat bank |
| 60 | 729+50 | 728+00 | 72800 | mb | 24 | 24 | 56 | | | | | | N | drains road ditch at hillslope base | clear of debris; no stainline; no water present | outlet filled with 1.6 ft sand from Chilkat backflow | discharges direct to Chilkat bank |
| 61 | 733+96 | 731+00 | 73100 | mb | 24 | 24 | 60 | | | 0.9 | | | N | | clear of debris but debris encroaching; no water present | stainline covers entire pipe (backwater effect); filled with 1 ft sediment (sand and gravels); no water present | discharges into road ditch that connects with oultet pool of 734 culvert. Fairly dry; road maint. |
| 62 | 735+80 | 733+50 | 73350 | mb | 36 | 36 | See surv. | | Yes | entire inlet stained (backwater effect) | entire inlet stained (backwater effect) | YES - S&HI | Y | drains stream | clear of debris; see survey data | clear of debris; see survey data | discharges to backwater slough of Chilkat |
| 63 | 735+86 | 733+50 | 73350 | mb | 36 | 36 | See surv. | | Yes | entire inlet stained (backwater effect) | entire inlet stained (backwater effect) | YES - S&HI | Y | drains stream | clear of debris; see survey data | clear of debris; see survey data | discharges to backwater slough of Chilkat |
| 64 | 26+30 | 755+00 | 75500 | mb | 24 | 24 | 72 | | | | | | N | drains road ditch/swale | filled with organics 0.5 ft | could not locate; buried with Chilkat sediment | if not buried would discharge direct to Chilkat bank |
| 65 | 31+07 | 760+00 | 76000 | mb | 24 | 24 | 60 | | | 0.7 | 0.6 | YES - S&HI | Y | drains ditch fed by hillslope waterfall | clear of debris; flowing water; avg chan width = 7 ft | clear of debris; freefall 0.7 ft to outlet pool ws | outlet pool depth 0.7 ft; avg chan width 4 ft; channel incised through silt prior to entering Chilkat |
| 66 | 34+12 | 763+00 | 76300 | mb | 24 | 24 | 72 | | | 0.7 | 0.7 | | y | drains ditch at base of hillslope | filled with 0.1 ft sediment; flowing water present | clear of debris | discharges direct to Chilkat side channel bank |
| 67 | 35+88 | 764+00 | 76400 | mb | 24 | 24 | 64 | | | 0.7 | 1.2 | | Y | drains road ditch fed by hillslope seeps/falls | filled with sediment 0.1 ft | filled with sediment 0.4 ft; 15% plugged | discharges direct to Chilkat bank |
| 68 | 36+92 | 766+00 | 76600 | mb | 24 | 24 | 62 | | | | | | Y | hillslope waterfall nearly at inlet; 1.5 ft riffle (cobbles) to river level | filled with sediment 0.8 ft; culvert half filled with water; inlet pool = 3 ft wide x 3 ft long x 0.3 depth | filled with sediment 0.7 ft | discharges direct to Chilkat bank |
| 69 | 39+79 | 768+00 | 76800 | mb | 24 | 24 | 58 | | | 0.8 | | | Y | upstream channel = 5 ft wide x 0.3 ft depth | clear of debris; flowing water present | clear of debris; 1/3 fileld with Chilkat backwater; no obvious stainline | discharges direct to Chilkat bank |
| 70 | 48+50 | 778+00 | 77800 | mb | 24 | 24 | 62 | | | | | | N | | clear of debris; no stainline; no water present | does not reach river; plugged with silt | 30 ft of river bank between outlet and Chilkat. Appears to be a cross drainage ditch; really no defined channel. |
| 71 | 61+38 | 790+00 | 79000 | mb | 36 | 36 | 52 | | | 1 | 1.4 | YES - S&HI | Y | upstream channel fed by hillslope waterfall; upstream channel 4.5 ft avg width | filled with sediment 0.3 ft; flowing water present | filled with sediment (Chilkat silt) 0.2 ft | discharges direct to Chilkat bank |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 72 | 65+16 | 794+00 | 79400 | mb | 24 | 24 | 52 | | | | | | Y | drains wall-based slough/wetland | clear of debris; stain covers entire pipe (backwater effects); 1/2 full of water | clear of debris; 1/3 full of standing water; water depth in pipe 1 ft; stainline covers entire outlet (backwater effects) | outlet pool = 4.5 ft wide x 25 ft long x 1.2 ft depth; juvenile salmonids present |
| 73 | 83+28 | 812+00 | 81200 | mb | 24 | 24 | 50 | | | | | | N | drains roadside ditch at base of hillslope | filled with sediment 0.3 ft; 15% plugged; no water present | 90% buried with Chilkat silt | 6 ft of river bank between outlet and Chilkat braid |
| 74 | 89+55 | 818+00 | 81800 | mb | 24 | 24 | 50 | | | | | | Y | drains south end of wetland complex | filled with organic sediment 0.6 ft; 80% plugged | could not locate; buried or under water | discharges into large wetland complex |
| 75 | 94+00 | 823+00 | 82300 | mb | 24 | 24 | 52 | | | | | | Y | standing water; drains wetland area | filled with sediment 0.5 ft; only 1.5 ft width open | could not locate; buried | discharges into large wetland complex |
| 76 | 119+15 | 847+00 | 84700 | mb | 24 | 24 | 50 | | | | | | N | drains roadside ditch/swale at hillslope base | filled with sediment 0.6 ft; inlet top bent; 10% plugged; no water present | filled with sediment 0.4 ft; 15% plugged | no well-defined channel |
| 77 | 130+05 | 858+00 | 85800 | mb | 24 | 24 | 52 | | | | | | N | | filled with sediment 0.2 ft; open width 1.8 ft; 25% plugged with organics; no water present | filled with sediment 0.7 ft; 20% plugged; no water present | |
| 78 | 136+02 | 863+00 | 86300 | mb | 24 | 24 | 52 | | | | | | N | | filled with sediment 0.4 ft; 1.5 ft width open; 25% plugged; no water present | filled with sediment 0.2 ft; 10% plugged; no water present | |
| 79 | 138+70 | 865+00 | 86500 | mb | 24 | 24 | 64 | | | 0.1 | | | N | drains road ditch | clear of debris/sediment; no water present | filled with sand 1 ft; 50% plugged | |
| 80 | 152+23 | 878+00 | 87800 | mb | 36 | 36 | 98 | | | 1.7 | 2.5 (backwater effects) | | Y | stagnate pool at inlet 15 ft x 15 ft x 1 ft depth | filled with organic sediment 0.4 ft; backwatered; standing water present | small amount of flowing water; | 60 ft from outlet to Chilkat braid. Silty muck |
| 81 | 160+50 | 887+90 | 88790 | mb | 6'-1"x4'-7" | 6'-1"x4'-7" | See surv. | | Yes | see survey data | see survey data | Yes | Y | drains roadside ditch (2-15 ft width) created by excavation for road fill; ditch filled with 2 ft organicy silt; ditch supplied by high gradient stream (egg boxes) | good condition; see survey data | clear of sediment; small drop to outlet pool water surface; see survey data | short distance to Chilkat braid (<50 ft); adult chum present; redds observed at outlet |
| 82 | 168+10 | 896+00 | 89600 | mb | 24 | 24 | 68 | | | | | | Y | u/s bfw = 12 ft; backwatered; water present but no discernable flow; connects with 887+70 ditch | filled with 0.8 ft sediment; 1 ft width open; barely functional | filled with sediment 1.4 ft | small stagnate pool near outlet 3 ft x 3 ft; dead and dying juvenile coho present |
| 83 | 187+25 | 915+00 | 91500 | mb | 24 | 24 | 56 | | | 0.4 | 0.2 | | Y | | clear of debris/sediment; flowing water draining ditchline | 0.6 ft freefall to cobble riffle; 3.5 ft long riffle to pool; pool 0.8 ft depth; fish passage barrier at this flow | 20 ft to confluence with Chilkat tributary |
| 84 | 193+85 | 921+00 | 92100 | mb | 36 | 36 (2) | See surv. | Stream realignment | Yes | see survey data | see survey data | Yes | Y | stream appears near bankfull | 2 36 inch culverts; water level near stainline; appears to be spring fed system | gradient steepens above inlet pool; see survey data | E channel; see survey data |
| 85 | | 921+00 | 92100 | mb | 36 | | see surv. | | Yes | | | YES - S&HI | Y | | One of two see above | | |
| 86 | 199+90 | 927+25 | 92725 | dm | 24 | 24 | 60 | | | none | | | N | drains roadside ditch | inlet slightly crimped; no stainline | undamaged; scour hole = 3 ft long x 3.5 ft wide x 0.7 ft depth | falls away steeply; filled with organic debris (leaves) |
| 87 | 207+36 | 933+00 | 93300 | dm | 24 | 24 | 62 | | | none | | | N | drains roadside ditch | 80% crimped; no stainline | 15-20% plugged with organics; no scour pool | no d/s channel; slight swale |
| 88 | 223+41 | 950+00 | 95000 | dm | 24 | 24 | 52 | | | none | | | N | drains roadside ditch | slightly crimped; no stainline; slight gravel build-up | slightly crimped; no scour pool | no discernable channel |
| 89 | 239+38 | 965+50 | 96550 | dm | 24 | 24 | 68 | | | none | | | N | drains roadside ditch | inlet torn and crimped; no stainline; clear of debris/sediment | could not locate; buried by leaves, wood, or gravel | no discernable channel |
| 90 | 263+52 | 989+00 | 98900 | mb | 8'-2"x5'-9" | 8'-2"x5'-9" | see surv. | | Yes | see survey data | see survey data | YES - S&HI | Y | debris flow; stream flowing in from south (re-routed to prevent frequent culvert plugging) | silt and cobble base (debris flow material); see survey data | see survey data | debris flow path |
| 91 | 270+68 | could not locate | could not locate | | 8'-2"x5'-9" | | 60 | | | | | | N/A | | | | |
| 92 | 274+68 | 1000+20 | 100020 | mb | 9'-9"x6'-9" | 9'-9"x6'-9" | see surv. | | Yes | see survey data | see survey data | Unknown - S&HI | Y | debris flow; stream flowing in from north (re-routed to prevent frequent culvert plugging); main slide path to south | silt and cobble/boulder base (debris flow material; see survey data | see survey data | debris flow path |
| 93 | 277+96 | 1004+50 | 100450 | dm | 36 | 36 | 52 | | | 0.4 | | | Y | drains north end of 21 mile fan and ditch | inlet slightly torn and crimped; slight gravel accumulation | slight obstruction by sapling; filled with sand 0.3 ft | discharges to road side drainate channel with cobble substrate |
| 94 | 299+51 | 1025+50 | 102550 | dm | 24 | 24 | 48 | | | | | | n | | 80% filled with gravel from upstream headcut | d/s channel aggraded to above pipe crown; pressure flow has maintained a 1 x 2 ft opening | |
| 95 | 309+20 | 1034+75 | 103475 | dm | 36 | 36 | 54 | | | | 0.5 | | Y | along relic debris flow channel; 50 x 75 ft excavated (trap) area at base of debris flow path | slightly crimped; nearly plugged by sediment | filled with sediment to 0.2 ft | discharges to Chilkat along 15 ft channel (filled with salmon bones) |
| 96 | 321+76 | 1047+25 | 104725 | dm | 24 | 24 | 60 | | | | | | N | possibly a relic debris flow path | obstructed by wood waste; area above possibly relic debris flow path | d/s channel aggraded to pipe crown; scour has kept outlet clear | no defined channel; 30 ft to Chilkat |

## Haines Highway - MP 3-25 Culvert Inventory

**Notes:** reference to 'emergent wetland' areas is used loosely by non-botanist and does not necessarily comply with strict wetland definition

Stainline height above invert refers to low point of metal culvert; does not reference accumulations of material within pipe

Criteria used for determining if waters of the U.S. : drains stream, waterfall, or hillslope seeps; drains wetland or connected to wetland with evidence of flowing water; fish present.

If notes indicate lack of channel (downstream or upstream), then did not consider a Water of the U.S.

| | As-built Station | ADOT&PF Station (9/'05) | | QA'd | Culvert Size (in) | Culv Size | Culvert Length (ft) | As-Built Comment | Eng. Survey | Height to Stainline @ inlet(ft)[1] | Height to Stainline @ outlet(ft)[1] | fish bearing | Waters of the U.S. | Upstream conditions | Inlet Conditions | Outlet Conditions | Downstream conditions |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 97 | 339+68 | 1065+50 | 106550 | dm | 24 | 24 | 60 | | | 0.6 | | | Y | drains small waterfall area; active flow | Recent pipe; obstructed by veg and sediment | free discharge to Chilkat riprap bank | discharges direct to Chilkat bank |
| 98 | 343+46 | 1069+00 | 106900 | dm | 24 | 24 | 62 | | | 0.7 | | | N | drains roadside ditch; wet but no flow | filled with debris 0.4 ft; slightly crimped; sump at inlet; excavated ditchline above crown | free discharge to Chilkat riprap bank | discharges direct to Chilkat bank |
| 99 | 346+00 | 1071+50 | 107150 | dm | 24 | 24 | 54 | | | 0.85 | 0.2 | | Y | adjacent ditch is wet seep; flowing water present | filled with gravel 0.5 ft; flowing water present | clear of debris; perched 0.1-0.2 ft; discharges to moderately steep channel to Chilkat; no Chilkat silt dep. | mod steep channel section to Chilkat |
| 100 | 348+24 | 1073+50 | 107350 | dm | 24 | 24 | 54 | | | | 0.7 | | Y | | filled with debris 1 ft; slightly crimped | filled with sediment 0.6 ft | short channel to top of Chilkat bank above siltation. Flowing water; a number seeps. |
| 101 | 350+43 | 1075+50 | 107550 | dm | 24 | 24 | 62 | | | 0.6 | 0.2 | | Y | | some gravel accumulation; flowing water present | clear of debris, has end section | mod steep channel to top of Chilkat bank; no siltation. Flowing water; a number os seeps. |
| 102 | 352+50 | 1077+50 | 107750 | dm | 24 | 24 | 56 | | | 1.1 stainline (0.3 rust line) | | | Y | | rust line 0.3 ft; flowing water present; slight sediment accumulation | outlet apron direct to Chilkat bank | discharges direct to Chilkat bank approx 5 ft above veg line. Flowing water; a number os seeps. GW coming out of hillside. |
| 103 | 355+09 | 1080+50 | 108050 | dm | 24 | 24 | 64 | | | 0.5 (rust line) | | | Y | small waterfall u/s of inlet | inlet crimped; flowing water present | discharges to Chilkat riprap bank | discharges direct to Chilkat bank |
| 104 | 360+08 | 1085+00 | 108500 | dm | 24 | 24 | 52 | | could not locate | | | | y | | | | |
| 105 | 372+75 | 1098+50 | 109850 | dm | 24 | 24 | 50 | | | 0.8 | 0.9 | no access - S&HI | Y | | filled with gravel 0.25 ft; water depth 0.3 ft above gravel | no outlet apron | steep channel. Active water flow. |
| 106 | 380+94 | 1106+00 | 110600 | dm | 24 | 24 | 56 | | | 0.2 | | | Y | small waterfall direct to inlet | slightly crimped; filled with gravel 0.1-0.2 ft | 1/2 filled with gravel and rock | discharges to waterfall to Chilkat River |
| 107 | 383+11 | 1108+00 | 110800 | dm | 24 | 24 | 54 | | | 0.3 | | | Y | active flow from seeps | undamaged and clear of debris; flowing water present | obstructed by organics - no adequate flushing flow | discharges to steep cascade (1:1) to Chilkat |
| 108 | 397+60 | 1123+00 | 112300 | dm | 24 | 24 | 54 | | | | 0.2 | | Y | drains waterfall/seeps aloing debris flow path | obstructed by rocks and veg to 1.6 ft; undamaged | undamaged; clear of debris | discharges to steep bank waterfall 1.8 ft to gully |
| 109 | 403+58 | 1129+00 | 112900 | | 36 | 36 | see surv. | | Yes | see survey data | see survey data | YES - S&HI | Y | small stream; very little flow | good condition; see survey data | good condition; see survey data | small channel; area has been heavily altered |
| 110 | 403+62 | | | | 36 | | 66 | | | | | | Y | | | | paired with 1129 culvert |
| 111 | 418+59 | could not locate | could not locate | | 36 | | 64 | | | | | | N/A | | | | |
| 112 | 420+79 | could not locate | could not locate | | 36 | | 60 | | | | | | N/A | | | | |
| 113 | 454+17 | could not locate | could not locate | | 24 | | 56 | | | | | | N/A | | | | |
| 114 | 466+88 | 1191+00 | 119100 | dm | 24 | 24 | 62 | | | none | none | | N | drains roadside ditch (dry) | good condition; no stainline | moss in bottom 0.3 ft; no stainline | no defined d/s channel |
| 115 | 472+18 | 1196+00 | 119600 | dm | 24 | 24 | 64 | | | | | | N | drains ditch (dry) | crimped; 50% obstructed; inlet perched 0.5 ft above ditch | some organics in bottom; good condition; possibly a recent extension; no stainline | |
| 116 | 476+64 | could not locate | could not locate | | 24 | | 60 | | | | | | N/A | | | | |
| 117 | 480+47 | 1206+70 | 120670 | | About 13' | About 13' | see surv. | | Yes | see survey data | see survey data | Unknown - S&HI | Y | large debris flow path; stream and debris flow path to north of inlet; excavated sediment trap at base of debris path; see survey data | concrete base; flowing water present; sheet flow over inlet apron; approx half of width with silt/cobble debris flow material; machinery able to drive through to clear culvert; see survey data | concrete base; approx half of width with silt/cobble debris flow material | debris path; see survey data |
| 118 | 488+60 | 1214+20 | 121420 | | 8'-2"x5'-9" | 8'-2"x5'-9" | see surv. | | Yes | see survey data | see survey data | Unknown - S&HI | Y | large sediment trap excavated u/s of inlet; large headcut at base of debris flow path; see survey data | partially obstructed with fill material from maintenance; no water present | perched; no water present; see survey data | debris path; see survey data |
| 119 | 511+95 | could not locate | could not locate | | 24 | | 56 | | | | | | N/A | | | | |
| 120 | 536+93 | not surveyed | not surveyed | | 24 | 24 | 54 | | | | | | N | | | | flooplain relief only |
| 121 | 537+89 | 1263+00 | 126300 | dm | 24 | 24 | 58 | | | none | | | N | | no slope; north end slightly crimped; no stainline; pipe likely to equalize floodplain flood waters on either side of road embankment | | |